CalESCO

CALIFORNIA EARTH SCIENCE CORPORATION

1318 SECOND STREET, SUITE 27 / SANTA MONICA, CALIFORNIA 90401 / TELEPHONE 395-4528, AREA CODE 213

June 10, 1974

Contract NAS 2-7698 MONTHLY PROGRESS REPORT NO. 12 May 1974 "Made available under NASA sponsorship in the interest of early and wide dissemination of Earth Resources Survey Program information and without liability for any use made thereot."

Fault Tectonics and Earthquake Hazards in the Peninsular Ranges, Southern California, EREP investigation 463

NASA, Ames Research Center. Mail Code 241-1 Moffett Field, CA 94035

Attention: Mr. Gabriel Fox

Contracting Officer

Gentlemen:

California Earth Science Corporation (CalESCO) is pleased to submit its 12th Monthly Progress Report on the application of Skylab imagery to analysis of fault tectonics and earthquake hazards in the Peninsular Ranges, southern California under NASA Contract No. NAS 2-7698.

Summary Outlook

The principal plans for the immediate future are to continue analysis of images from SL1/SL2 and SL3. The milestone plan provides a time-oriented schedule of the entire effort to be performed.

Significant Progress

- 1. SO-192 data from SL3 and SL4 was requested.
- 2. Simple test images for comparing pseudocolor with black and white images were generated.
- 3. Field work was continued on the Thing Valley fault. Exposures of the fault were traced across the Tierra Blanca Mountains. The fault is believed to extend in a northeast direction for about 15 miles.
- 4. Field work was initiated on prominent east-west lineaments seen on 190-B images north of Warner Springs, San Diego and Riverside Counties.
- 5. A systematic program of measuring faults in road cuts throughout the Peninsular Ranges was continued. Ninety-eight strikes and 37 rakes of striations have been measured to date.

EARTHQUAKE HAZARDS IN THE FENINSULAR RANGES, SOUTHERN CALIFORNIA Monthly Progress (California Earth Science Corp., Santa Monica.) 2 p HC \$4.00 CSCL 086

Unclas

Expected Accomplishments, Current Month

- Evaluation of the photo interpretation test given to 35 students at UCLA will be completed.
- 2. Field work on prominent lineations seen in 190-B images of the eastern Peninsular Ranges will be continued.

Travel Summary and Plans

A paper on structural lineaments in the Peninsular Ranges will be presented at the First International Conference on the New Basement Tectonics in Salt Lake City, June 3-7.

Very truly yours,

CALIFORNIA EARTH SCIENCE CORPORATION

Donald L. Lamar

Co-Principal Investigator

cc: National Aeronautics and Space Administration Scientific and Technical Information Facility Code KS Washington, D.C. 20546

> Mr. John W. Tremor NASA, Ames Research Center Moffett Field, CA 94035

NASA Manned Spacecraft Center Attn: Martin Miller, Mail Code TF6 Houston, TX 77058

NASA Manned Spacecraft Center Earth Observation Division Attn: V. M. Dauphin, Mail Code TF Houston, TX 77058